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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,065	04/27/2001	Bernhard L. Convent	STL 920000073US2	1668

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EXAMINER

SIDDIQI, MOHAMMAD A

ART UNIT PAPER NUMBER

2154

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/845,065

Applicant(s)

CONVENT ET AL.

Examiner

Mohammad A Siddiqi

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/27/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/1/2002
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-42 are presented for examination.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-11, 13-25, 27-39, and 41-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Ireland et al. (6,266,666) (hereinafter Ireland).

4. As per claims 1, 15, and 29, Ireland discloses a method, system, and article of manufacture for enabling access to data, comprising:

receiving a call from a client (210, fig 2) to invoke a remote interface method (220, fig 2, col 4, lines 9-19);

accessing (220, fig 2, col 4, lines 1-3), with a remote interface implementation (220, fig 2, col 3, lines 18-24), parameters from the received call (col 6, lines 33-38) in response to the invocation of the remote interface method (response is in the form of tabular result set, col 8, lines 56-60);

generating a stored procedure call (col 9, lines 48-55) with the accessed parameters as input parameters (class ParamDef, col 11) of the stored procedure (col 9, lines 48-55 and col 10, lines 45-49);

transferring the stored procedure call to a stored procedure named by the call to execute (col 9, lines 51-60);

receiving output from the stored procedure (output is tabular result set, col 9, lines 47-51);

inserting the received output from the stored procedure into a data object (result set is an object, col 9, lines 47-51); and

returning the data object to the client (210, fig 2, col 10, lines 7-10).

5. As per claims 2, 16, and 30, Ireland discloses the stored procedure executes in a database server (col 9, lines 47-51 and col 14, lines 39-40, "exec " is a command to execute store procedure in the database) and generates the output (col 9, lines 51-55, query is a method used to request information from a database), wherein the output is capable of comprising

output that is a member of the set of output comprising one or more result sets (col 9, lines 51-51) of data from the database table (col 5, lines 51-60) and one or more output parameters resulting from stored procedure operations (col 9, lines 47-52) performed on data in the database table (col 9, lines 47-51 and col 14, lines 39-40, "exec " is a command to execute store procedure in the database).

6. As per claims 3, 17, and 31, Ireland discloses processing, with the remote interface implementation (220, fig 2, col 12, lines 54-59), an input mapping (lookup in hash table, col 12, lines 8-26) to determine the parameters (CmdMap, col 12, lines 64-67 and col 13, lines 1-30) in the client call to use as input parameters to the stored procedure call (col 16, lines 62-67).

7. As per claims 4, 18, and 32, Ireland discloses receiving the stored procedure output after the stored procedure program completes execution (write data out, col 10, lines 29-35).

8. As per claims 5, 19, and 33, Ireland discloses processing an output mapping indicating how the stored procedure output is mapped to the data object (tabular result set, col 10, lines 36-42).

9. As per claims 6, 20, and 34, Ireland discloses the output is capable of including result sets and parameters (col 9, lines 59-65), wherein the output mapping indicates an order (JDBC result handle, col 4, lines 19-20) in which the received result sets and parameters are added to the data object (addParamDef and getParamDef, col 11 and col 12, lines 7-11).

10. As per claims 7, 21, and 35, Ireland discloses generating metadata describing the stored procedure output included in the data object (col 10, lines 60-65); and  
adding the metadata to the data object (col 12, lines 7-11 and col 10, lines 13-20).

11. As per claims 8, 22, and 36, Ireland discloses processing, with the client, the metadata in the received data object to determine how to access the stored procedure output from the data object (col 12, lines 7-11 and col 10, lines 13-20).

12. As per claims 9, 23, and 37, Ireland discloses the data object is comprised of multiple elements, wherein the stored procedure (col 10, lines 45-48) output includes rows of data from at least one result set (tabular

result set, col 10, lines 60-62), wherein inserting the stored procedure output into the data object further comprises inserting data from each column in each row in each result set to one element in the data object (col 10, lines 14-20 and lines 60-62, and wherein the metadata defines structure and types of data in each element (col 10, lines 14-20).

13. As per claims 10, 24, and 38, Ireland discloses wherein the data object is comprised of multiple elements (tabular result set, col 10, lines 60-67), and wherein the stored procedure output is capable of including multiple output parameters (col 10, lines 60-67), wherein inserting the stored procedure output into the data object further comprises inserting each output parameter into one element in the data object (col 10, lines 60-67), and wherein the metadata provides information on structure and type of the data in each element (col 10, lines 60-67 and col 4, lines 19-23, JDBC allows mappings from SQL types to Java types that can be used by the ResultSet getter methods. ) .

14. As per claims 11, 25, and 39, Ireland discloses the client only receives one data object with stored procedure output in response to the call (tabular result set, col 10, lines 60-62).

15. As per claims 13, 27, and 41, Ireland discloses a method, system, and article of manufacture for making stored procedure programs available to application programs, comprising:

determining one stored procedure program generating output needed by one application program (col 10, lines 45-47 and lines 60-63, tabular result set is an output);

generating a remote interface implementation to respond to a remote interface method capable of receiving a call (220, fig 2) from the application program (210, fig 2) including data and invoking a stored procedure in a database server (230, fig 2) with the data from the application program used as input (col 12, lines 29-61); and

generating an output mapping for the remote interface implementation (tabular result set, col 10, lines 36-42) to use to determine how to insert the stored procedure output into a data object that may be used by the application program (col 8, lines 16-31 and col 10, lines 13-20).

16. As per claims 14, 28 and 42, Ireland discloses the generated remote interface implementation inserts metadata (col 10, lines 46-49) into the data object providing information on the stored procedure output inserted into the data object (col 10, lines 46-49 and lines 60-65).



***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 12, 26, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ireland et al. (6,266,666) (hereinafter Ireland) in view of Clegg et al. (6,356,946) (hereinafter Clegg).

19. As per claims 12, 26, and 40, Ireland discloses wherein the remote interface implementation is implemented as a Enterprise JavaBean (211, fig 2, col9, lines 18-23). However, Ireland fails to disclose the data object comprises a Java serializable object. Serialiazble object is well known in the art, i.e, Ireland disclosure of serializing the output using Sybase Tabular Data Stream. For example, Clegg discloses the data object comprises a Java serializable object (col 4, lines 27-35). It would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Ireland and Clegg because Clegg's use of Java object serialization would provide Ireland's system methodology for streaming to

client objects stored and managed remotely, so that the objects may be executed or manipulated locally at the clients.

### ***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,516,310 teaches join query.

U.S. Patent 6,591,295 teaches stored procedure in relational database.

U.S. Patent 6,243,709 teaches loading stored procedure in database.

U.S. Patent 6,473,807

U.s. Patent 6,438,559

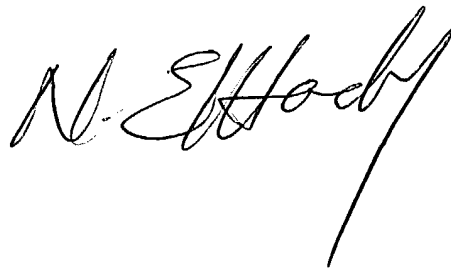
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A Siddiqi whose telephone number is (703) 305-0353. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-

8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS

A handwritten signature in black ink, appearing to read "N. El-Hachy", with a long, sweeping diagonal stroke extending downwards and to the right.